



ROADMAP TO A SUSTAINABLE SOLID WASTE MANAGEMENT FUTURE

County Inter-Departmental Working Group

Roadmap Subcommittee Meeting Agenda

Thursday, May 12, 2016

9:00 A.M. – 11:00 A.M.

1. Welcome and Introductions (10 min)
2. Inspiring Solutions to Plastic Pollution Presentation (30 min)
3. Breakout Sessions (60 min)
 - County Unincorporated
 - Regional/Countywide Subcommittee
 - County Operations Subcommittee
 - Outreach and Education Subcommittee
4. Open Discussion and Next Steps (15 min)

ALGALITA

Marine Research and Education

INSPIRING SOLUTIONS TO PLASTIC POLLUTION



www.algalita.org

WHAT WE DO

RESEARCH



WHAT WE DO

EDUCATION



WHAT WE DO

PREVENTION





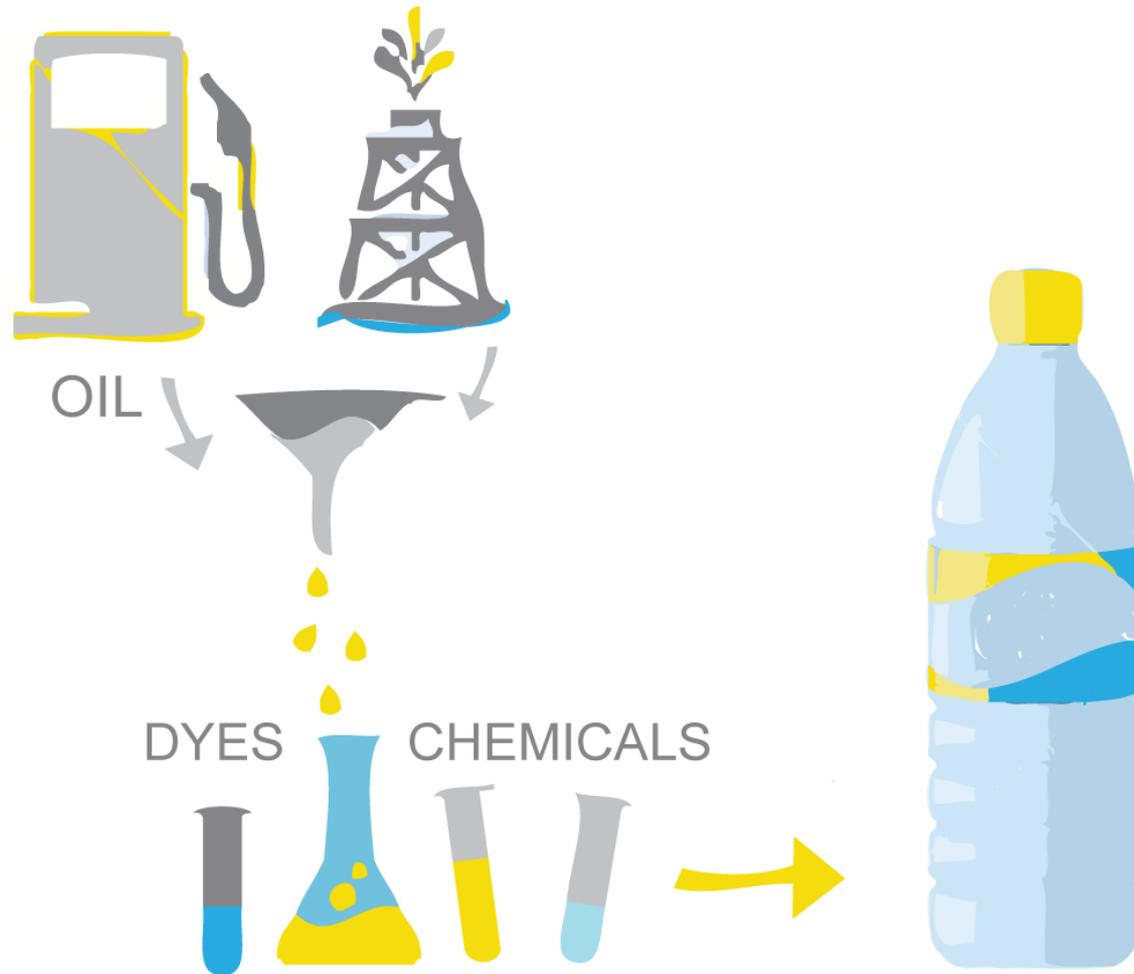






PLASTIC POLLUTION BREAKDOWN

WHAT IS PLASTIC MADE OF?



PLASTIC POLLUTION BREAKDOWN

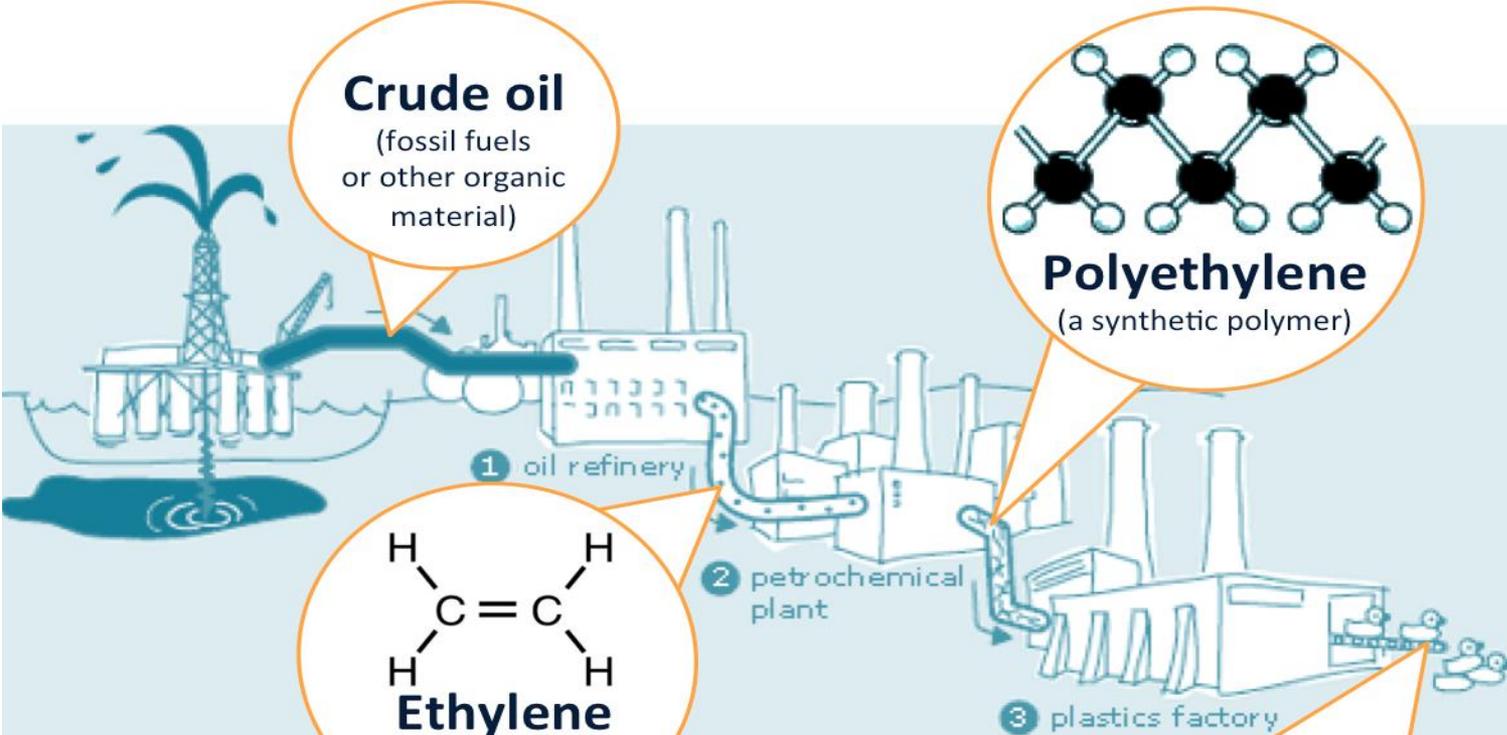
WHAT IS PLASTIC MADE OF?

Every single plastic water bottle requires **25%** of the volume it contains of petroleum to make:



PLASTIC POLLUTION BREAKDOWN

HOW IS IT MADE?



“Nurdles” (plastic pellets used in the production of plastic items, like plastic forks)



PLASTIC POLLUTION BREAKDOWN



PLASTIC POLLUTION BREAKDOWN



PLASTIC POLLUTION BREAKDOWN

WHERE DOES IT COME FROM?



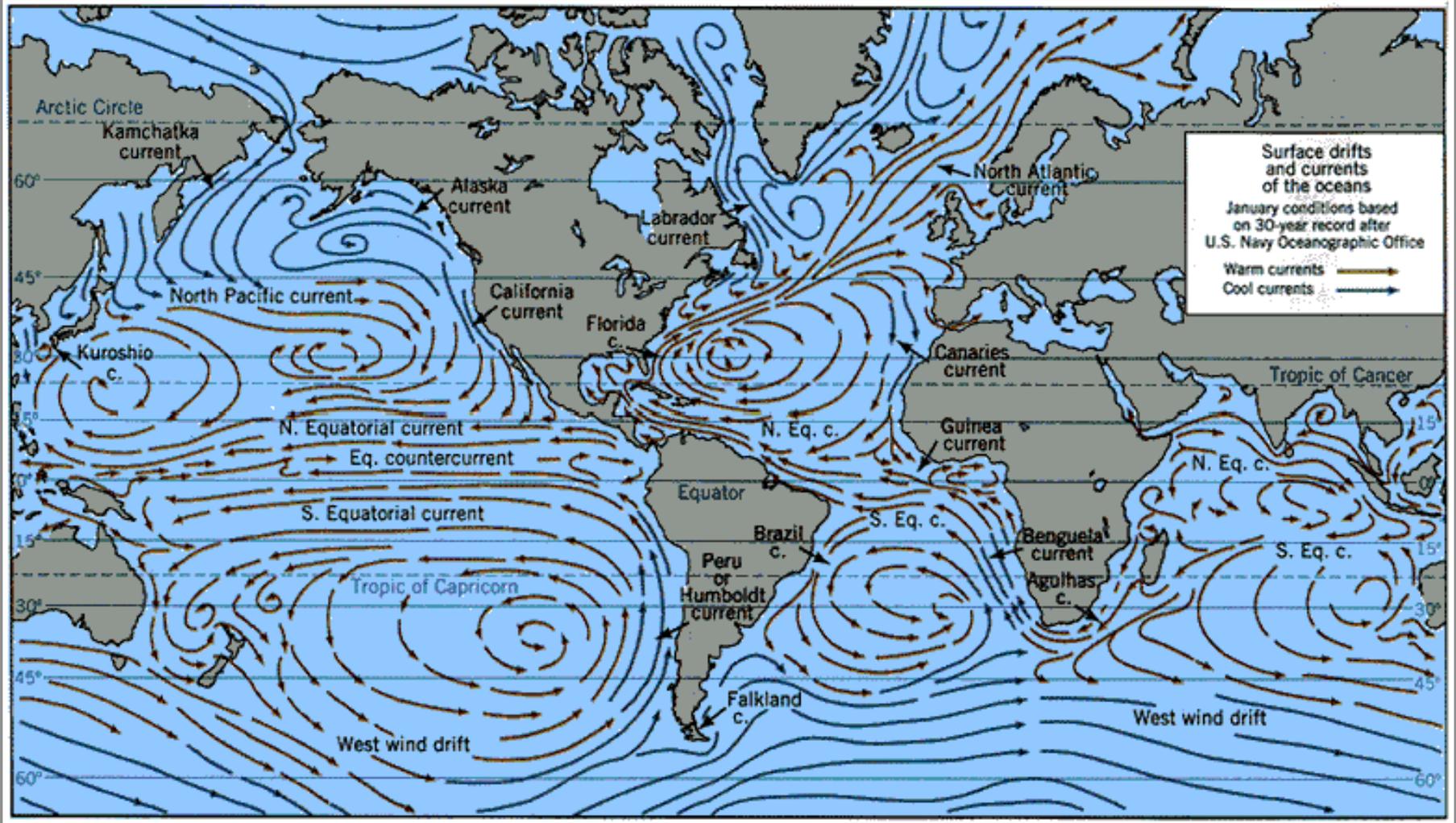
PLASTIC POLLUTION BREAKDOWN

WHAT HAPPENS WHEN PLASTIC LEAVES ENTERS THE OCEAN?



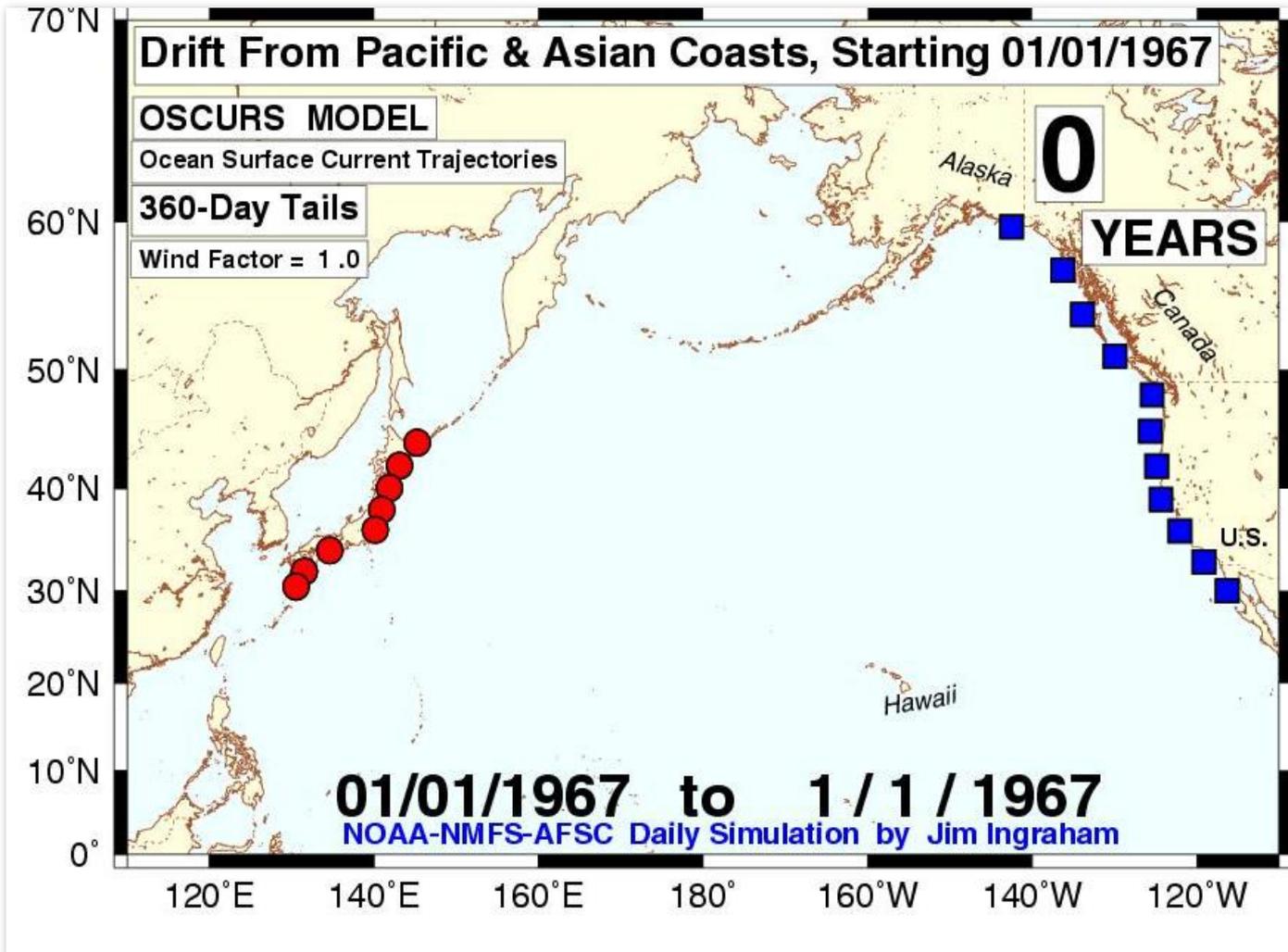
PLASTIC POLLUTION BREAKDOWN

OCEAN SURFACE CURRENTS AND GYRES



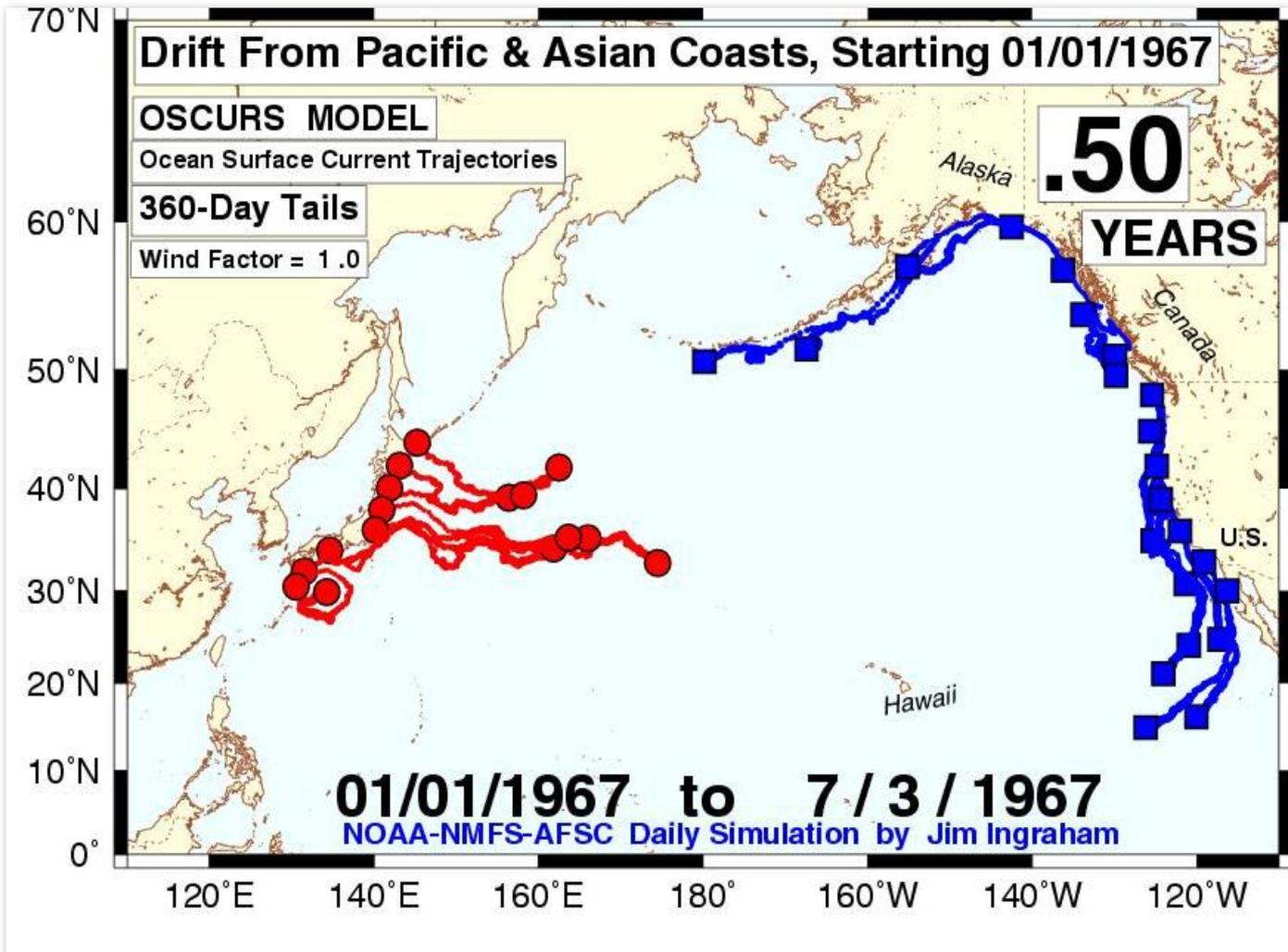
PLASTIC POLLUTION BREAKDOWN

HOW DOES PLASTIC DEBRIS TRAVEL?



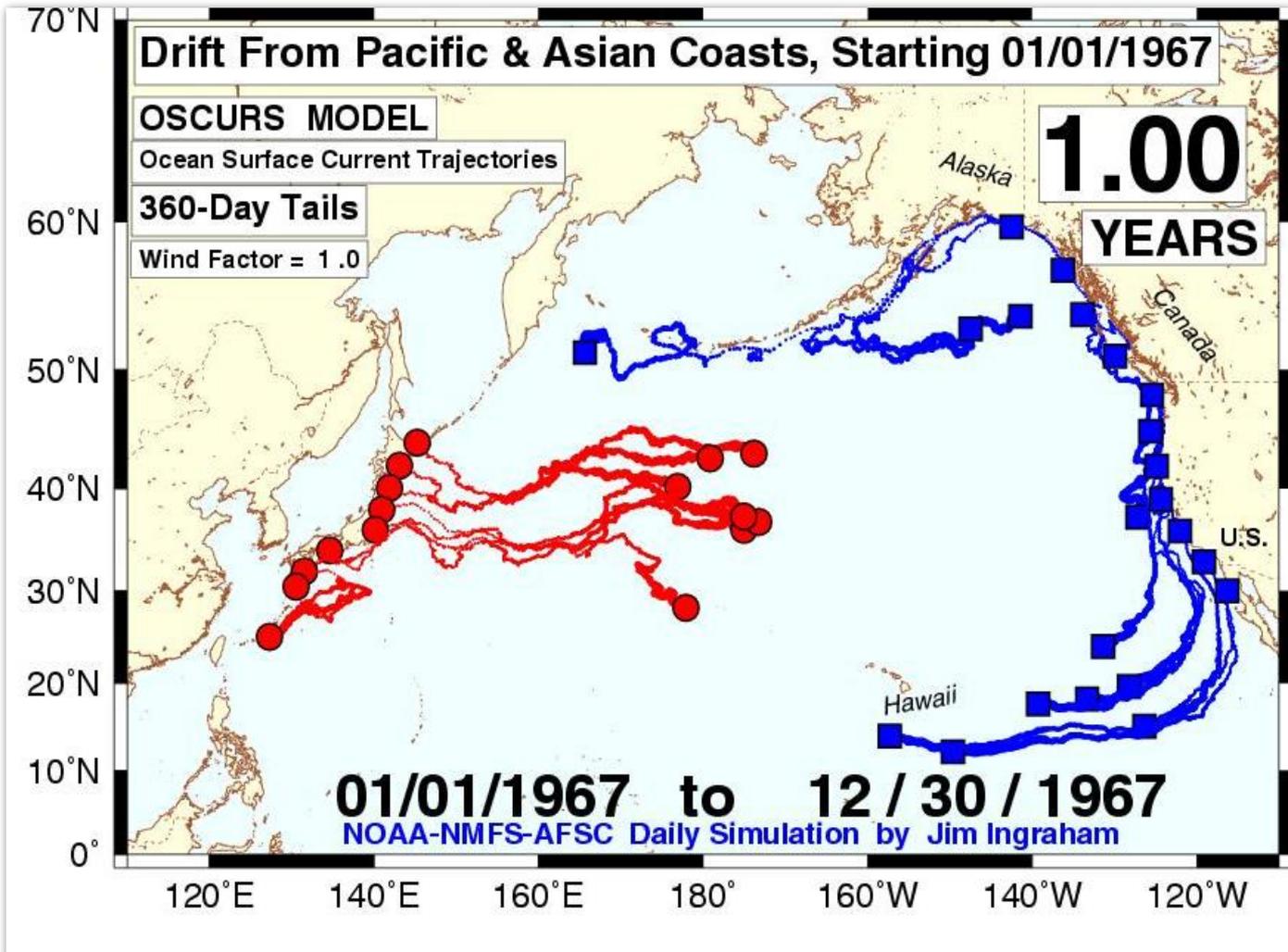
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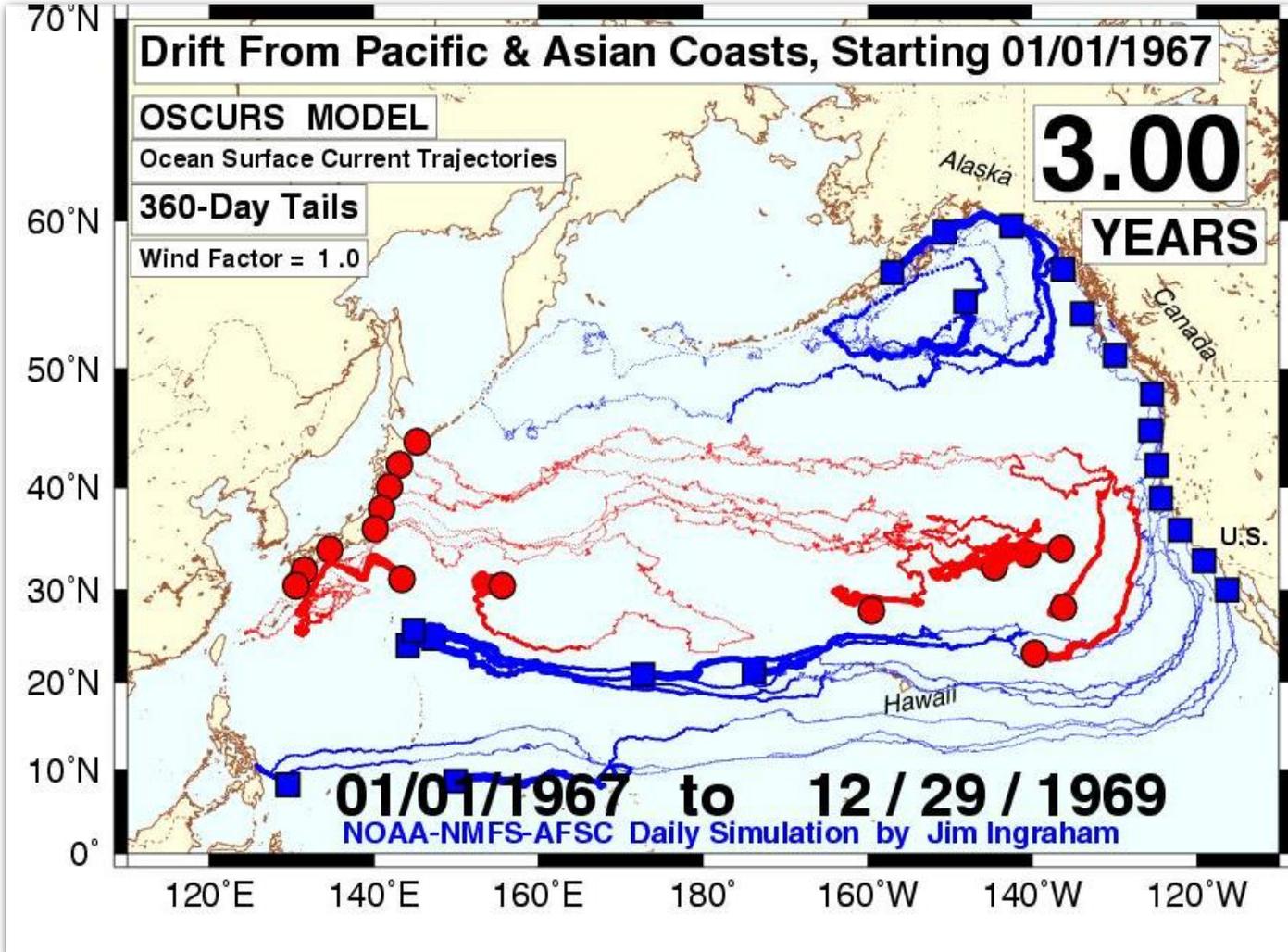
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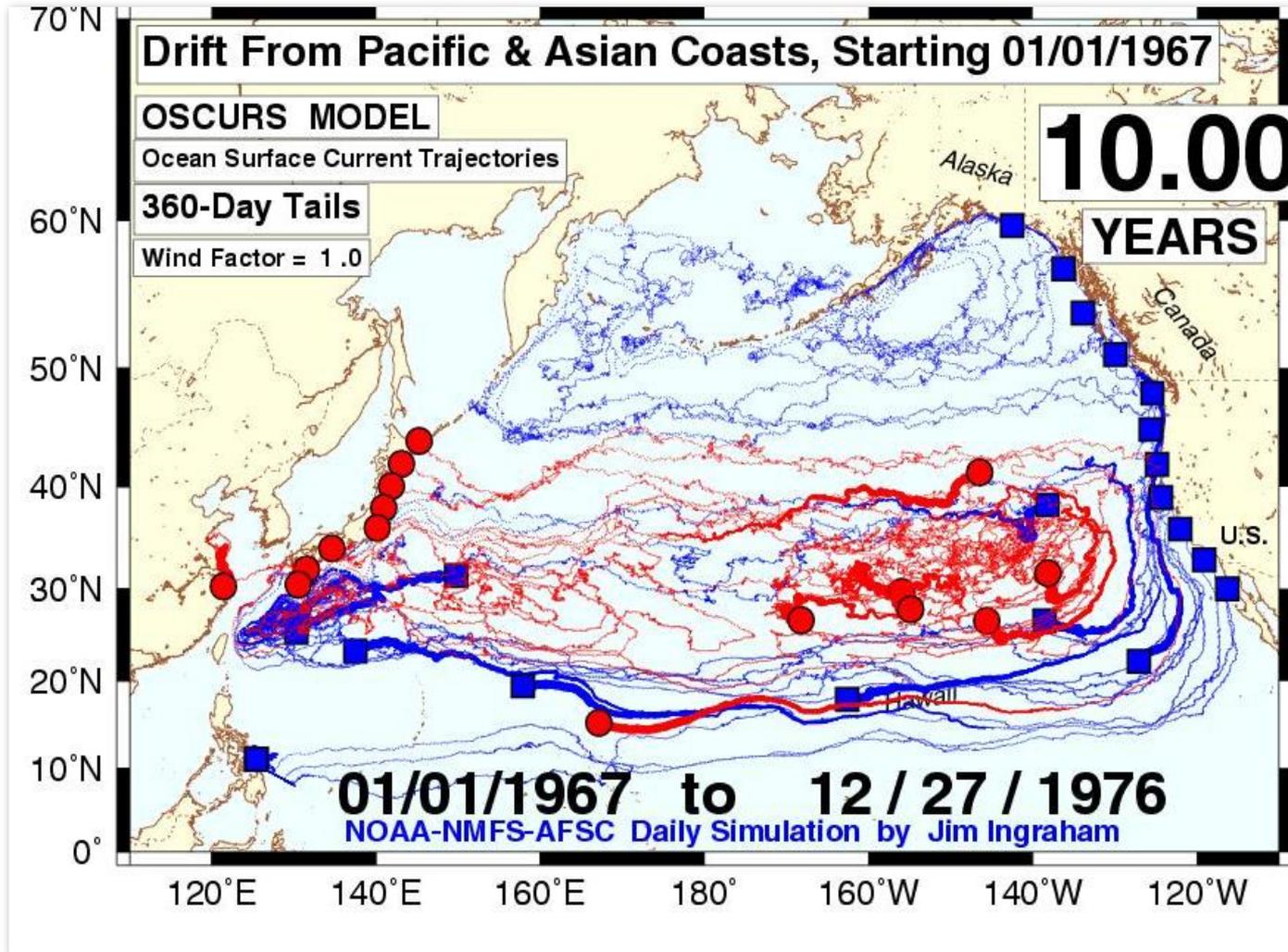
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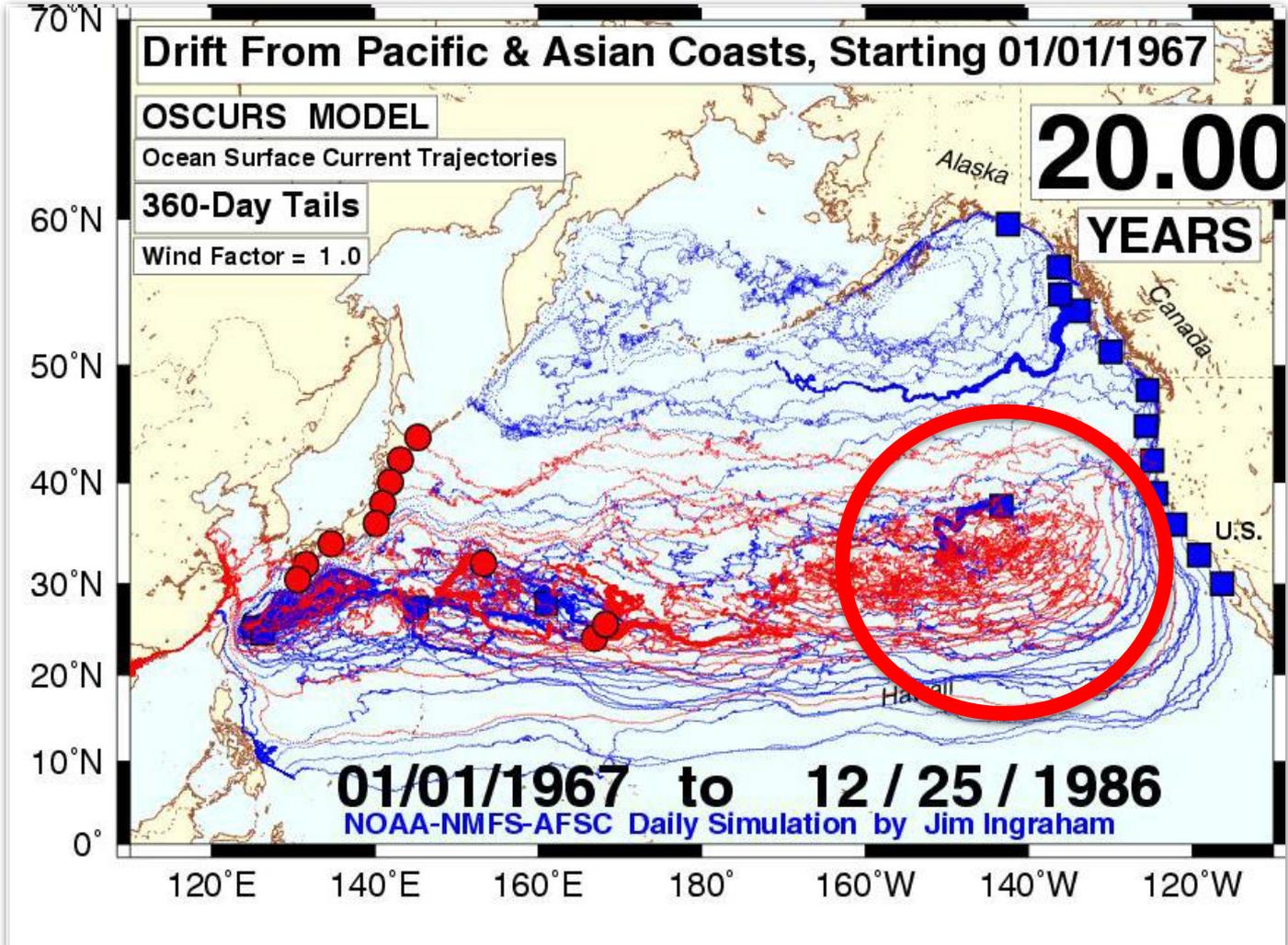
PLASTIC POLLUTION BREAKDOWN

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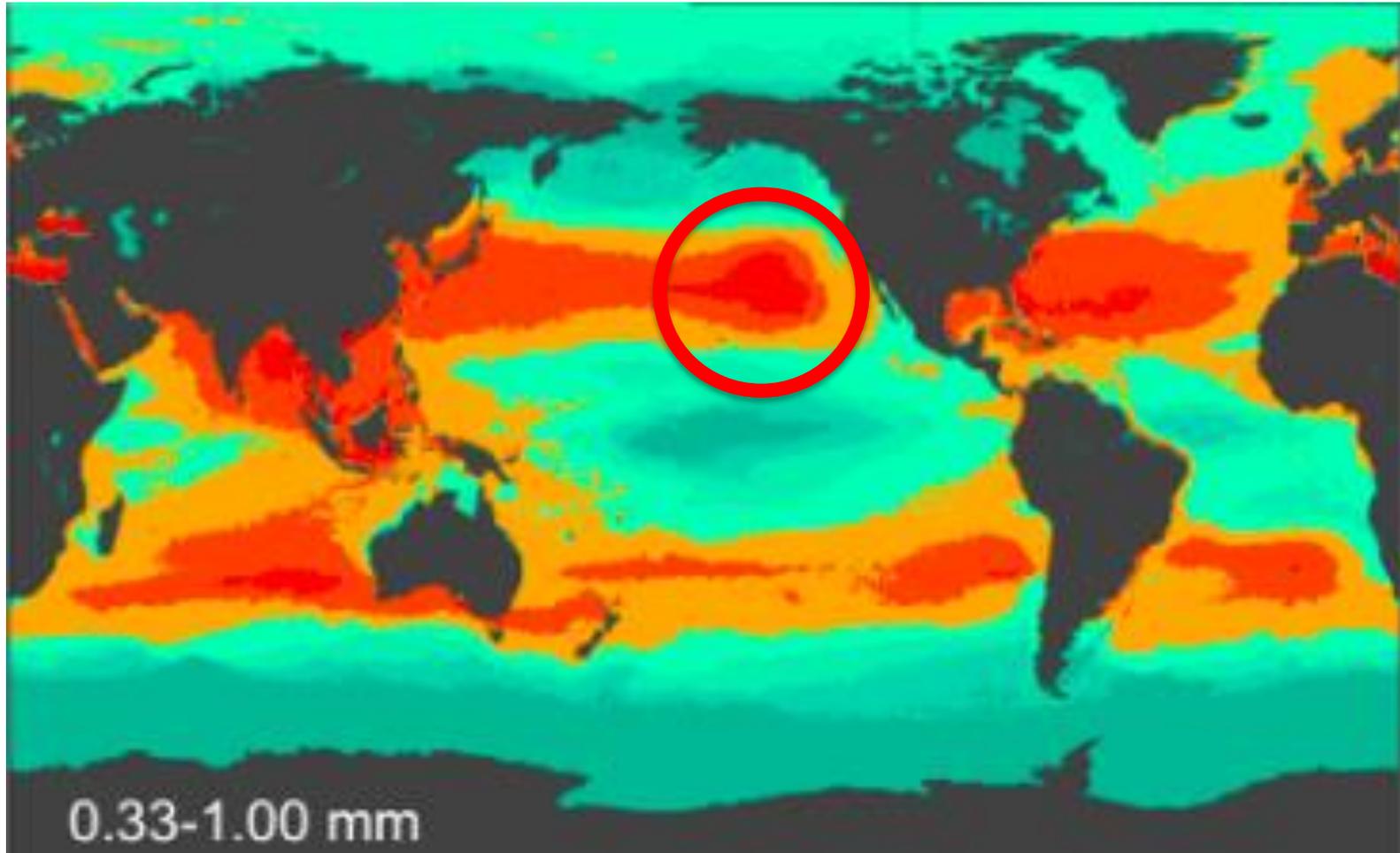
PLASTIC POLLUTION BREAKDOWN

HOW DOES PLASTIC DEBRIS TRAVEL?



PLASTIC POLLUTION BREAKDOWN

PLASTIC SOUP



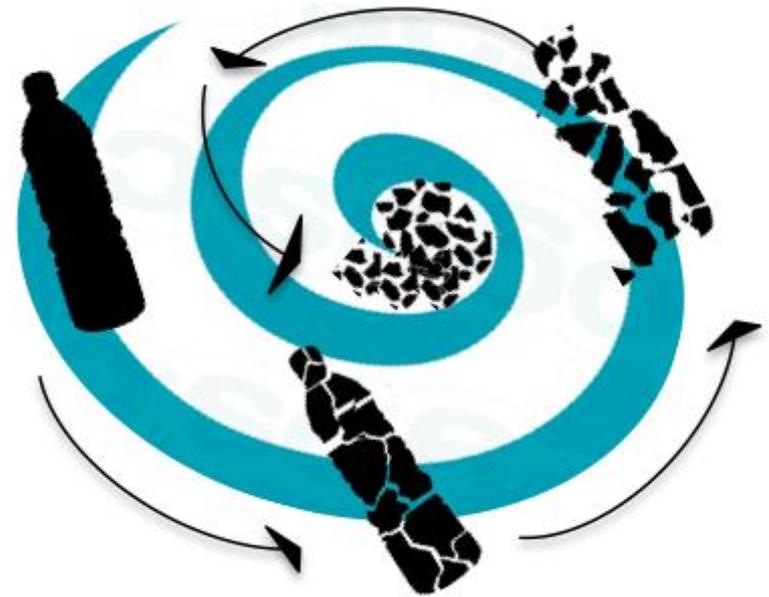
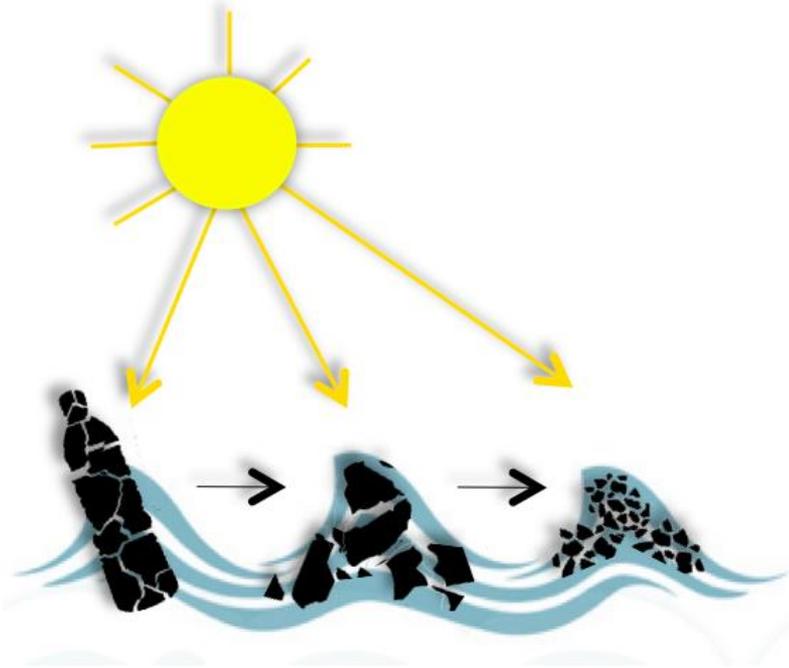
PLASTIC POLLUTION BREAKDOWN

PLASTIC SOUP



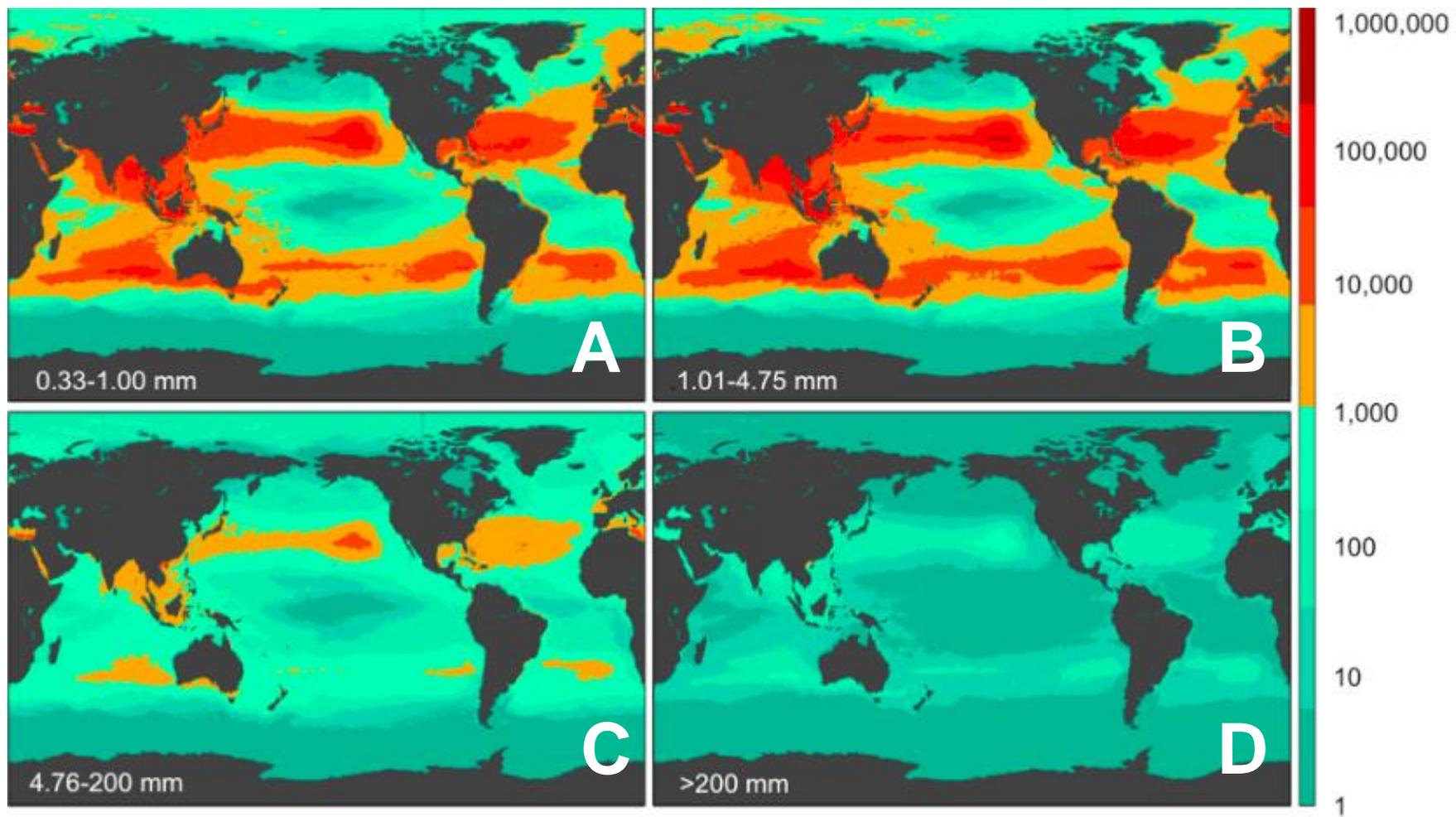
PLASTIC POLLUTION BREAKDOWN

PHOTODEGRADATION



PLASTIC POLLUTION BREAKDOWN

PLASTIC SOUP



PLASTIC POLLUTION BREAKDOWN

Unless steps are taken to properly manage waste by 2025, the ocean could contain:

 **1 TON**
of plastic

— FOR EVERY —

 **3 TONS**
of finfish

PLASTIC POLLUTION BREAKDOWN

WITH GLOBAL IMPLICATIONS



PLASTIC POLLUTION BREAKDOWN

ENTANGLEMENT

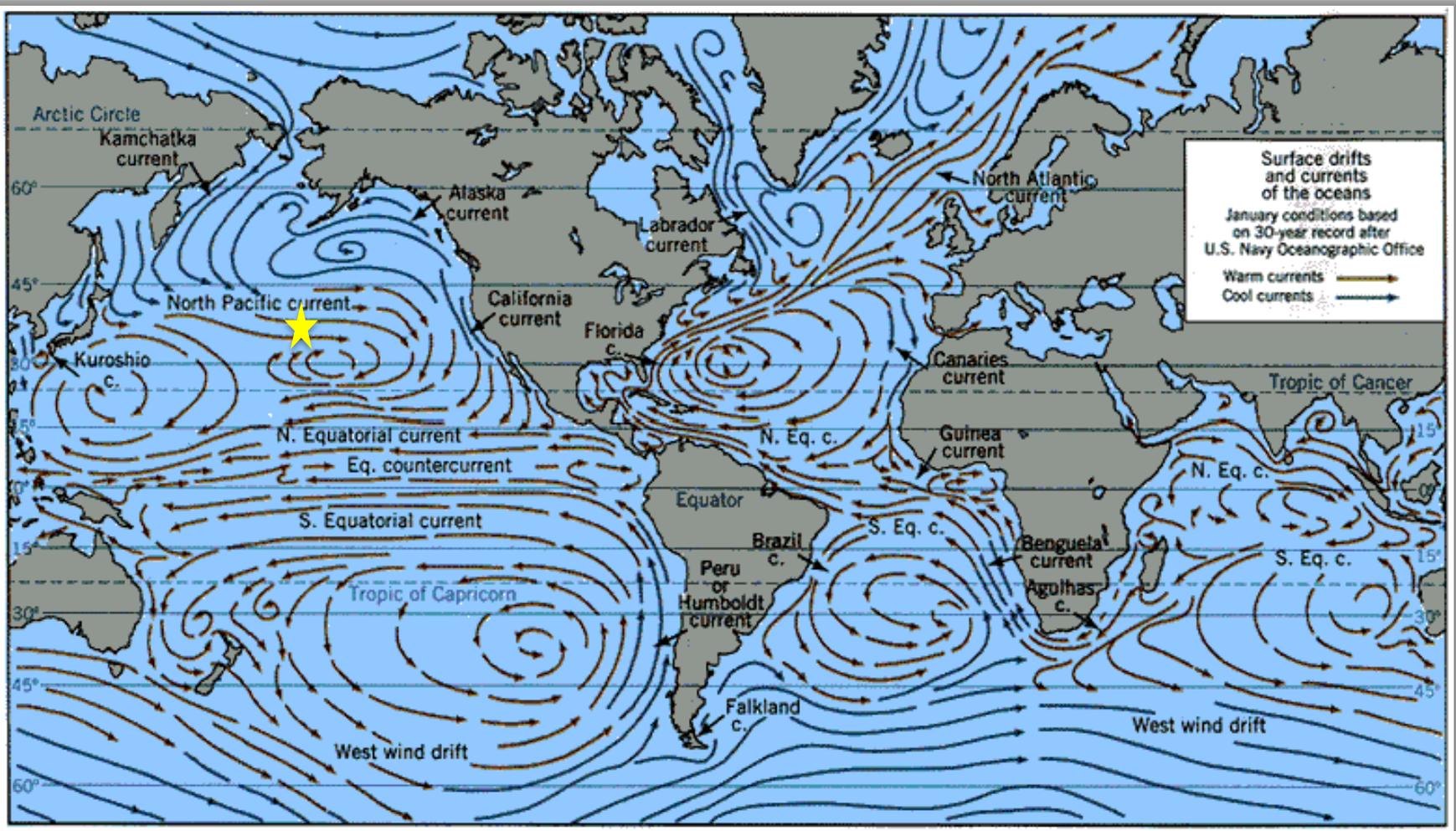


PLASTIC POLLUTION BREAKDOWN

INGESTION



PLASTIC POLLUTION BREAKDOWN



PLASTIC POLLUTION BREAKDOWN



PLASTIC POLLUTION BREAKDOWN

IMPACTS ON THE FOOD CHAIN & HUMAN HEALTH



PLASTIC POLLUTION BREAKDOWN

ALGALITA'S 2008 LANTERNFISH STUDY

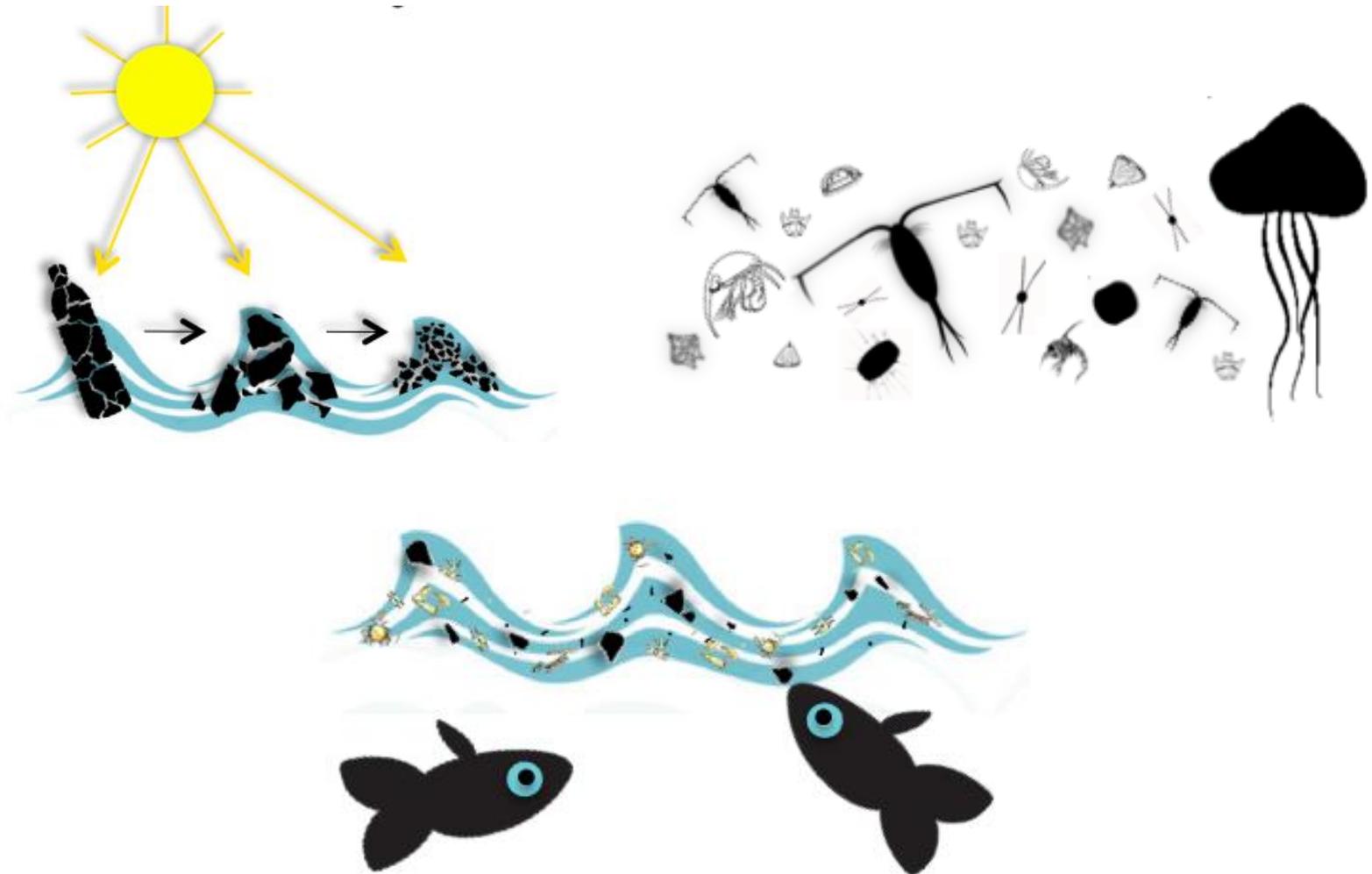


385 FISH

40%

PLASTIC POLLUTION BREAKDOWN

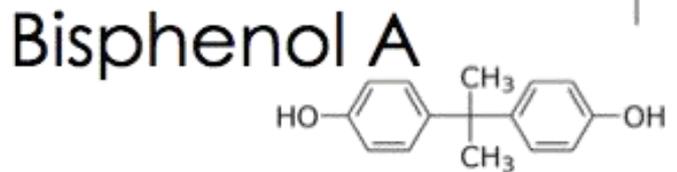
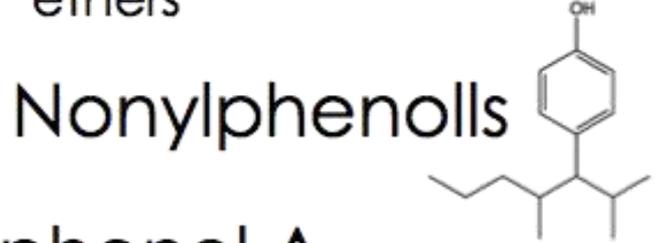
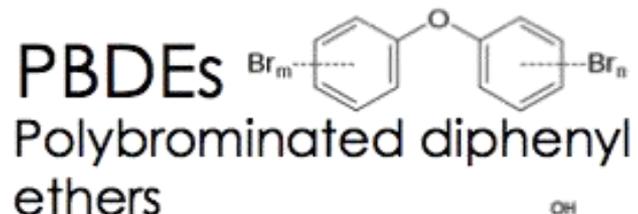
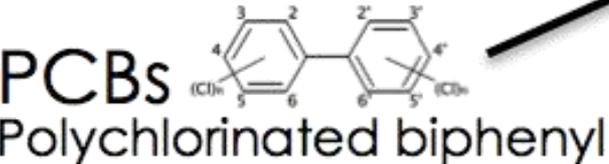
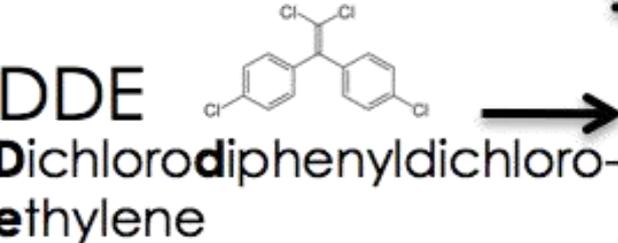
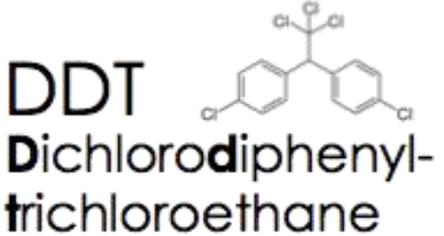
PLASTIC SOUP



PLASTIC POLLUTION BREAKDOWN

TOXIC CHEMICALS

ADSORBED
RELEASED



PLASTIC POLLUTION BREAKDOWN

IS PLASTIC IN THE OCEAN THREATENING THE SURVIVAL OF LANTERNFISH?



HOW CAN WE STOP THIS?



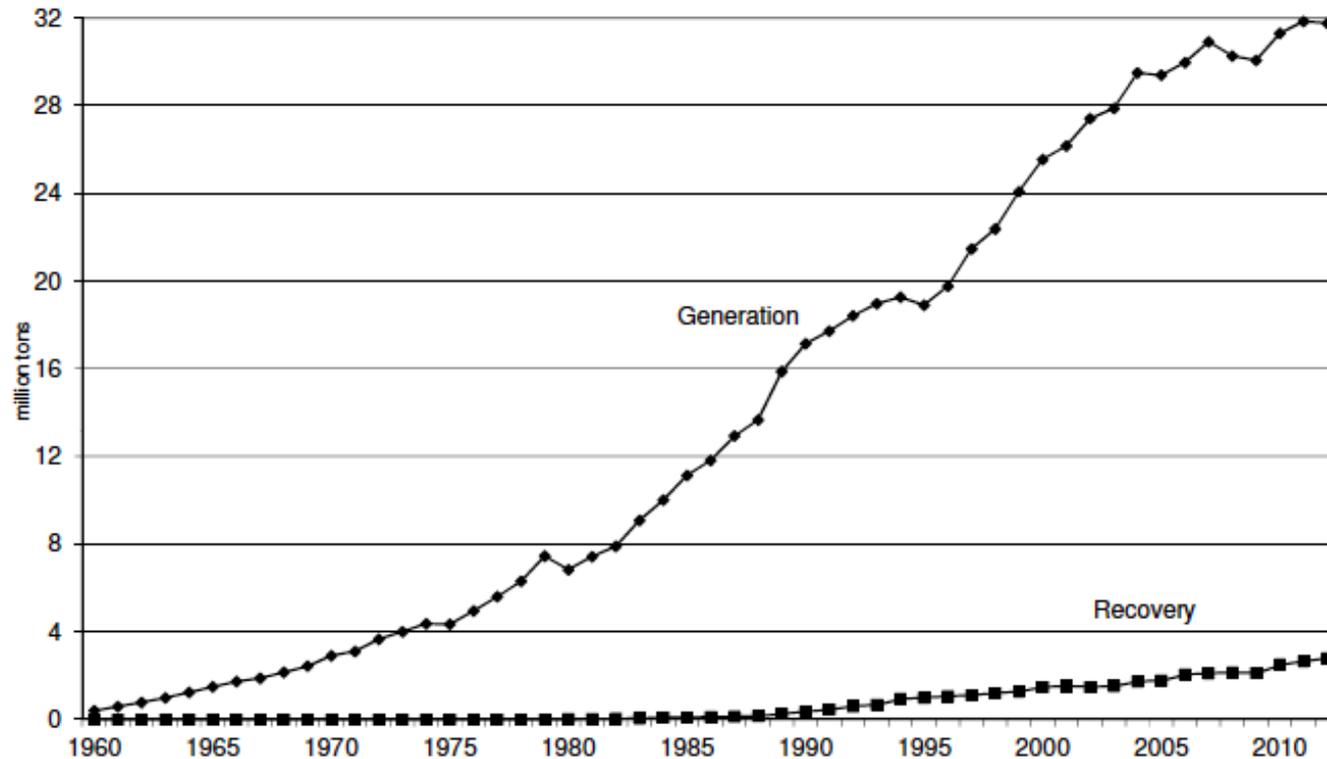
HOW EFFECTIVE IS RECYCLING?



HOW EFFECTIVE IS RECYCLING?

APPROXIMATELY **3-5% OF PLASTIC** IS RECYCLED IN US

Figure 9. Plastics generation and recovery, 1960 to 2012



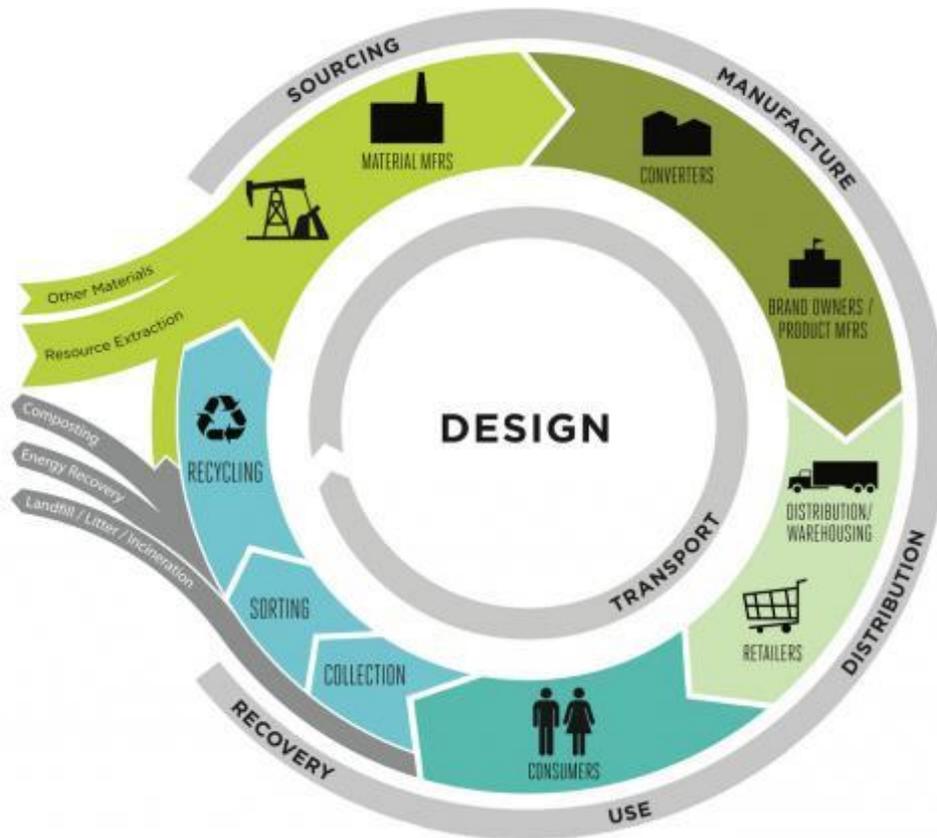
SOURCE: EPA

WHY??

SOURCE: CEO DAVID STEINER – WASTE MANAGEMENT, INC

THE SOLUTION

A circular economy must prevail.
Industry + Government + Businesses + Consumers



THE SOLUTION

Industry

Plastic Producers and Distributors

Design products to be more valuable, sustainable, and safer for the environment

Provide funding and resources for post-consumer collection and processing of any plastics introduced into the marketplace (Extended Producer Responsibility)

Let communities protect themselves by keeping special interests out of politics.



THE SOLUTION

Governments

Local and global

Work with industry to ramp-up waste management spending that will create a functioning secondary market and trigger investment in packaging and recovery systems

Bans on plastic bags, Styrofoam and microbeads. (Feasibility will depend on various factors including the availability of substitutes, political considerations etc.)

Economic incentives such as deposit refund schemes and plastic bag charges

Work to standardize the act recycling through implementation of standardized labels

Launch and monitor trash collection programs, better plastic facility tracking, and address homeless encampments



THE SOLUTION

Point-of-service Businesses

Restaurants, stores, etc

Replace harmful single-use plastic with more sustainable alternatives

Improve internal waste management systems

Provide a space for groups to education the public about the harms associated with single-use plastic



**WHAT GOES
IN THE OCEAN
GOES IN YOU.**

THE SOLUTION

Consumers

You and Me!

Rethink single-use plastic & bring your own!

Recycle what you cannot refuse

Support your local economy

Encourage your business or school to rethink single-use plastic

Clean up your beach

Support local plastic pollution community campaigns



THE SOLUTION

Non-Profit Organizations & Educators

fueling the movement

Collecting compelling information to push for positive change

Raising awareness and providing support

Inspiring people to find their unique place in the movement.

Providing support to those who join the fight

Bringing people to together to talk about ideas

Working together to push big picture solutions

AND IT'S WORKING!!!



ALGALITA'S DISTRICT 3 PROGRAM

WHY AT THE **CITY DISTRICT** LEVEL?

SOCIOECONOMIC FACTORS =

CULTURE
LIFESTYLE

INFLUENCERS = **CHANGE**

TO DEVELOP **CULTURALLY SPECIFIC EDUCATION**
PROGRAMS

INVOLVING **RESPECTED** LOCAL

INFLUENCERS
BUSINESSES
SCHOOLS
ORGANIZATIONS
COMMUNITY GROUPS

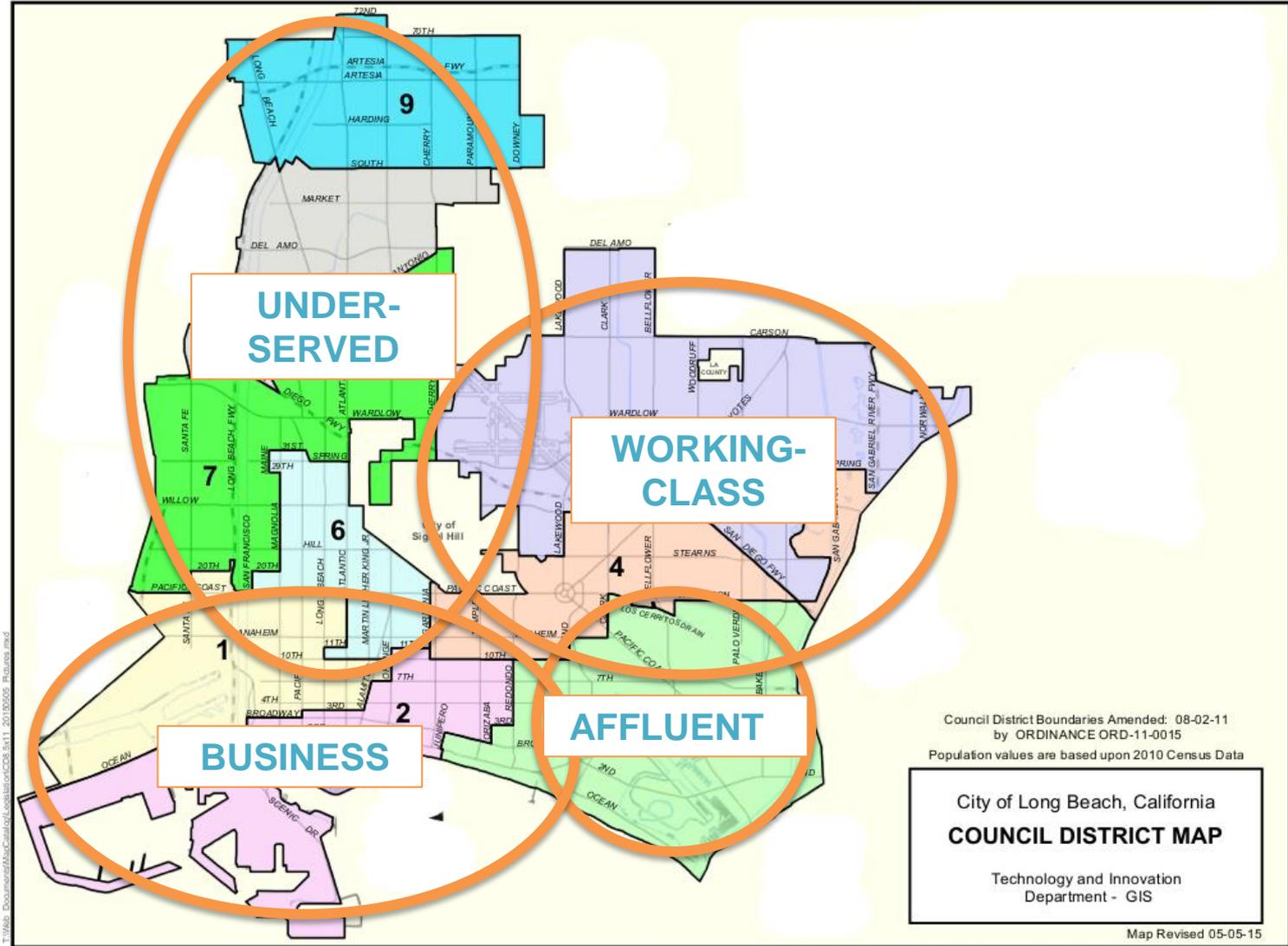
CREATE **MODELS** FOR THE DIFFERENT **TYPES** OF COMMUNITIES

AFFLUENT
WORKING-CLASS
UNDER-SERVED
BUSINESS

THAT REACHES DIFFERENT **AGE GROUPS**

CHILDREN
TEENS
MILLENNIALS
ADULTS
SENIORS

NEIGHBORHOOD MAPPING



\\saweb\Documents\GIS\CityofLongBeach\GIS\Map\2010\0505 - PLANS.mxd

Council District Boundaries Amended: 08-02-11
by ORDINANCE ORD-11-0015
Population values are based upon 2010 Census Data



Public Works Hydration Station Pilot Program



Breakout Sessions

- County Operations
- County Unincorporated Communities
- Regional/Countywide
- Outreach and Education



Open Discussion and Next Steps

**Thank you for
participating.**



Upcoming Meetings

- Subcommittee Meeting – June 8, 2016
- Subcommittee Meeting – July 14, 2016